Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the present application:

Please amend claims 1, 4, 8, 10, 12 and 13 and cancel claims 7 and 11 as follows:

1. (currently amended) A device for monitoring a medical microsample in [[the]] a flow measuring cell of an analyzer comprising: ~~with regard to position and the absence of bubbles by means of an alternating voltage applied to the measuring cell, said measuring cell being provided with a multitude of~~

at least one electrode system[[s]]~~, which are placed one behind the other and~~ comprising[[e a number of]] at least two single electrodes positioned within said flow measuring cell [[each]], wherein

said electrode system is configured for measurement[[ing]] of at least one substance contained in the microsample by application [[means]] of a measurement voltage which is essentially a DC voltage, and detection of absence of bubbles and/or positioning of said microsample by application of an alternating voltage to said flow measuring cell,

[[wherein]] both the alternating voltage and the measurement voltage are simultaneously and directly applied to the single electrodes of the respective electrode system, and

[[wherein]] the measured AC component or the measured impedance provides a measure for the position of the microsample and the absence of bubbles; and

a circuit for producing the voltages to be applied to the single electrodes, which circuit has a summation point at which the alternating voltage for the purpose of

monitoring the medical microsample with regard to position and absence of bubbles is superposed on the DC voltage serving as measurement voltage.

2. (original) A device according to claim 1, wherein an electrode system includes a working electrode and a reference electrode, both electrodes serving as electrical contacts for measuring the impedance between working electrode and reference electrode.

3. (original) A device according to claim 1, wherein an electrode system includes a working electrode, a counter-electrode and a reference electrode, the working electrode and the counter-electrode serving as electrical contacts for measuring the impedance between working electrode and counter-electrode.

4. (currently amended) A device according to claim 3, wherein ~~in systems for continuous measurement the electrodes are arranged in the sequence~~ the working electrode is positioned in front of the[[,]] reference electrode, and the counter-electrode is positioned behind the reference electrode in flow direction of the microsample.

5. (original) A device according to claim 3, wherein counter-electrodes are placed both in front of and behind the working electrode in flow direction of the microsample, both counter-electrodes being electrically short-circuited.

6. (original) A device according to claim 3, wherein the counter-electrode and the working electrode are positioned opposite each other in the measuring cell.

7. (cancelled)

8. (currently amended) A device according to claim [[7]]1, wherein the summation point is connected with the inverting input terminal of an operational amplifier.

9. (original) A device according to claim 1, wherein each electrode system is provided with a device for measuring impedance, which is configured as a circuit for superposing an alternating voltage on a DC voltage.

10. (currently amended) A method for monitoring a medical microsample ~~with regard to position and absence of bubbles, which is introduced into the~~ in a flow measuring cell of an analyzer comprising:

providing an analyzer including a flow measuring cell and a device comprising at least one ~~and passes a multitude of~~ electrode system[[s]], each said system comprising ~~a number of~~ at least two single electrodes;

introducing a microsample into said flow measuring cell, said microsample passing said electrode system;

[[for]] measuring at least one substance contained in the microsample by [[means of]] applying a measurement voltage to said flow measuring cell, which said measurement voltage is essentially a DC voltage; and

detecting the absence of bubbles and/or position of said microsample in an area of said at least one electrode system by applying[[, wherein]] an alternating voltage to said flow measuring cell simultaneous with said measurement voltage [[is coupled in]] via two single electrodes of said at least one electrode system, and detecting [[wherein]] the AC component or impedance measured ~~is used as a measure for the sample position and absence of bubbles of the microsample in the area of the at least one electrode system~~.

11. (cancelled)

12. (currently amended) A method according to claim 10, wherein the microsample in the flow measuring cell is moved along until a predetermined value for impedance or conductance is obtained, which indicates that the microsample is positioned precisely in the area of the respective electrode system.

13. (currently amended) A method according to claim 10, wherein the sample position and absence of bubbles of the microsample are determined in the area of each electrode system.